

WHAT IS CLAIMED IS:

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1. A method for charging customers for use of software comprising the steps of:  
establishing a use-based pricing scheme for a set of software modules;  
distributing the set of software modules to a customer;  
monitoring customer use of the software modules; and  
charging the customer according to use of the distributed software modules as  
determined during the monitoring step.

10 2. The method of claim 1 wherein the customer creates a number of instances from a  
software module, and use of the software module is measured according to instances  
detected at a site of the customer during the monitoring step.

15 3. The method of claim 2 wherein instances created from a software module are  
periodically accessed to determine use during the monitoring step.

20 4. The method of claim 3 wherein the monitoring step comprises registering each  
day that an instance created from a software module is active; and wherein the charging  
step comprises charging the customer a daily rate for use of the software module.

25 5. The method of claim 1 further comprising the step of providing a demonstration  
mode for instances such that instances in the demonstration mode are executable at a  
customer site without charge.

30 6. The method of claim 1 further comprising maintaining a single agreement  
governing use of instances created from the set of software modules for an enterprise.

7. The method of claim 1 further comprising the step of monitoring a termination  
date for instances derived from a software module having a time-limited duration.

8. The method of claim 7 further comprising the step of issuing a warning in response to detecting an upcoming expiration date for an instance of a software module.

9. The method of claim 1 further comprising the step of maintaining an account for storing units of credit for a customer; and wherein said charging step comprises decrementing the customer's credit account by an appropriate number of units of credit based upon said monitoring step.

10. The method of claim 1 further comprising the step of generating a report summarizing use of software modules at the customer site.

11. The method of claim 1 wherein the charging step is based upon registered uses of a software module.

12. The method of claim 11 wherein the registered uses of a software module are measured according to execution of an instance created from the software module.

13. The method of claim 12 wherein the instance is an object created from an object class.

14. The method of claim 11 wherein the software module is an object class for creating an application engine object.

15. The method of claim 11 wherein the software module is an object class for creating a view engine object.

16. The method of claim 1 wherein the monitoring step comprises determining a time duration that a software module is active.

17. The method of claim 1 wherein the monitoring step comprises registering execution of an instance that tracks throughput of a process.

18. The method of claim 1 wherein individual ones of the set of software modules are  
5 individually priced.

19. The method of claim 1 wherein the set of software modules includes at least a first software module supplied by a third party vendor and further comprising the step of:  
compensating a third party vendor based upon a use by a customer of the first  
10 software module determined during the monitoring step.

20. The method of claim 1 wherein the distributing step comprises transmitting the set of software modules via a network connection.

21. The method of claim 20 wherein the network connection comprises an Internet  
15 connection.

22. The method of claim 1 comprising a step of reporting usage information to a software brokerage facility.

23. The method of claim 22 wherein the reporting step includes identifying the  
20 location of an instance created from a software module.

24. The method of claim 1 comprising the step of determining that a license manager  
25 has not reported to a software brokerage facility and in response registering a communication failure at a central licensing facility.

25. The method of claim 1 wherein the monitoring step includes storing use information in summary format in a database.

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26. The method of claim 1 further comprising the step of issuing a re-ordering reminder to a customer.

27. The method of claim 1 wherein the software modules relate to industrial  
5 manufacturing automation software.

28. The method of claim 1 wherein the software modules relate to industrial manufacturing information software.

10 29. The method of claim 1 further comprising maintaining an agreement governing use of instances created from the set of software modules for an enterprise wherein the instances comprise both lifetime billed and use-based billed instances.

15 30. The method of claim 1 further comprising the step of providing configuration tools enabling a user to create customized instances from the software modules.

31. A method for vending software in the form of software modules via electronic commerce channels comprising the steps of:

20 maintaining an electronic commerce site including a software module selection interface, the software module selection interface enabling a customer to request a software module for use at a customer site;

providing a software module management framework to the customer for installation at a customer site, wherein the management framework includes components  
25 for registering use of the software module at the customer site; and

charging the customer based upon registered use of the software module.

32. The method of claim 31 wherein the use of the software module comprises executing an instance created from the software module.

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33. The method of claim 31 wherein the use of the software module comprises creating an instance from the downloadable module.

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34. The method of claim 31 registering use of the downloadable module provides a measure of throughput of an industrial process.

35. The method of claim 31 wherein the module management framework supports creation of instances from software modules at the customer cite having differing use modes including at least: a lifetime mode and a use-based mode, and wherein said method comprises the further step of registering execution of instances operating in the use-based mode.

36. The method of claim 35 wherein the use-based mode is measured in days and wherein an instance operating in use-based mode is registered each day in which the instance is executed.

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37. A method for charging customers for use of software comprising the steps of:  
providing a set of individually identifiable units of executable software;  
individually pricing ones of the set of individually identifiable units of executable software;  
authorizing use of the executable software; and  
charging a customer based upon use of selected ones of the set of individually identifiable units of executable software.

38. The method of claim 37 wherein the authorizing step comprises transmitting a license file containing code enabling use by the customer of the executable software.

39. The method of claim 37 further comprising the step of:  
integrating self-monitoring process software within the executable software; and  
registering use of the executable software by the self-monitoring process.

40. The method of claim 37 wherein the executable software is industrial automation software.

Sub A 5 41. The method of claim 37 wherein the self-monitoring process software comprises includes functions for informing the customer of a need to reorder credit to continue using the executable software.

10 42. A method for charging customers for use of software comprising the steps of:  
first providing a set of software modules for software customers;  
second providing a software licensing facility including a brokering facility  
through which software customers pay for software execution units, and wherein the  
brokering facility includes a set of software customer accounts; and  
charging a software customer account a number of software execution value units  
15 based upon the value of software modules utilized by a customer.

43. The method of claim 42 wherein the charging step is performed by an automated billing process.

20 44. The method of claim 42 comprising the further step of providing an on-line customer interface; and wherein the first providing step includes the step of providing a network interface enabling users to download software modules from a remote location.

25 45. A method for administering, via on-site processes, a set of software modules provided to a software customer comprising the steps of:

recording a set of software modules deployed in a system for the software customer;

monitoring, from a location within the system, use of the set of software modules in view of a set of terms governing use of the software modules by the customer; and

notifying the software customer via network messaging channels of events concerning use of the set of software modules.

46. The method of claim 45 wherein an event comprises expiration of a present  
5 license period.

47. The method of claim 45 wherein an event comprises depletion of credit units in an account for the customer.

10 48. The method of claim 45 further comprising providing an on-line network user interface enabling software customers to perform software licensing transactions with an automated licensing manager.

49. The method of claim 45 further comprising calculating a fee for the use of  
15 selected software modules.

50. The method of claim 49 wherein the calculating step comprises determining an amount of usage of the software modules.

20 51. A method for distributing software modules for use by customers via an on-line networked interface comprising the steps of:

first providing a set of software modules to a customer;

second providing a value for the use of the set of software modules by the customer;

25 third providing a set of terms and conditions to the customer;

recording acceptance, via the on-line customer interface, of the terms and conditions by the customer; and

issuing an electronic license to the customer thereby enabling use of the software modules by the customer.

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52. The method of claim 51 wherein the first providing step comprises providing the set of software modules on a electronically readable non-volatile storage media.

53. A software module facilitating automated distribution of software to customers comprising:

a supplier identification;  
a product description;  
a billing definition; and  
an executable program.

54. The software module of claim 53 wherein the billing definition includes a usage rate.

55. The software module of claim 54 wherein the billing definition includes a lifetime rate.

56. A method for administering distribution of software modules to customers comprising:

providing a set of software modules to a customer originating from multiple vendors;

receiving a registration request message from the customer indicating that the set of modules have been installed on a system;

determining use of individual ones of the set of software modules by the customer;

charging the customer for the use of the set of software modules; and  
crediting the accounts of individual ones of the vendors in accordance with use of individual ones of the set of software modules by the customer.



57. The method of claim 56 further comprising the step of recording in a statistical database information concerning use of individual ones of the software modules provided by multiple vendors.

5 58. A method for administering the distribution of software modules to customers comprising:

providing a set of software modules to a customer originating from multiple vendors;

receiving a registration request message from the customer indicating that the set  
10 of modules have been installed on a system; and

recording in a summary database, information concerning use of individual ones of the software modules from multiple vendors.

15 59. A license manager module for deployment at a customer enterprise, the license manager comprising:

a network address identifier;

contact information;

a license value allocated to the customer enterprise;

20 deployed software module use monitoring software; and

communication functions enabling communication with a master licensing facility operated on behalf of a distributor of the set of software modules.

60. The license manager module of claim 59 further comprising an expiration date  
25 that limits the time frame in which a set of software modules monitored by the license manager may be installed upon a customer's system.

61. The license manager module of claim 59 wherein the license manager includes  
monitoring software for enforcing a set of terms and conditions concerning use of a set of  
30 software modules at a customer site.

62. A license manager module for deployment at a customer site, the license manager module comprising:

a description of a set of software modules with which the license manager module  
5 is deployed and use limitations for individual ones of the set of software modules;

monitoring software for enforcing the use limitations associated with individual  
ones of the set of software modules; and

communication functions enabling the license manager to communicate with a  
central software brokering facility.

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63. The license manager module of claim 62 wherein the use limitations of software  
modules include a use mode, wherein the use mode facilitates designating one of a set of  
available durations from a set of options including at least: a lifetime duration and a  
termination date-based duration.

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64. The license manager module of claim 63 wherein the set of available durations  
includes a use number-based duration.

65. The license manager module of claim 62 wherein the use limitations of software  
20 modules include billing constructs, wherein the billing constructs facilitate designating  
one of a set of billing modes including at least: a lifetime mode and a period-based mode.

66. The license manager module of claim 65 wherein the set of billing modes includes  
a product volume based billing mode.

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67. The license manager module of claim 66 wherein the product volume based  
billing mode is associated with a measured process variable.

68. A remote on-line customer interface facilitating deployment of software modules  
30 from a software distribution facility comprising:

a list of vendors for software modules;  
a set of price terms for deployment of the software modules in the customer's  
system; and

a cost estimator tool enabling a customer to build a software system from the  
5 software modules and determine a cost estimate, based upon projected use of the software  
modules, for use of the software system.

69. The remote on-line customer interface of claim 68 wherein the cost estimator  
includes processes enabling a user to input projected future use estimates.

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70. The remote on-line customer interface of claim 68 wherein product offerings  
through the on-line customer interface are arranged according to vertical market, thereby  
enabling customers to focus upon software module offerings arranged specifically for  
particular end users.

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71. The remote on-line customer interface of claim 70 wherein use-based licensing  
terms are tailored to particular vertical markets.

72. The remote on-line customer interface of claim 70 wherein software modules are  
20 pre-packaged according to vertical market.

73. A method for distributing software modules to customers comprising the steps of:  
providing a billing quotation for a described use of a set of software modules to a  
customer;

25 receiving a request, from the customer, for a license to use software modules;  
generating, in response to the receiving step, a license file;  
downloading the license file to the customer; and

providing a license manager to the customer for installation within the customer  
enterprise to monitor use of the software modules within the customer enterprise.

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